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ANSWERS FOR CANCER

Publication in Clinical and Translational Medicine Demonstrates Mutation Capsule™'s potential in MRD Assay Developments

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BEIJING, April 07, 2022 (GLOBE NEWSWIRE) -- Genetron Holdings Limited ("Genetron Health" or the "Company", NASDAQ: GTH), a leading precision oncology platform company in China that specializes in offering molecular profiling tests, early cancer screening products and companion diagnostics development, today announced that a research piece titled "Integrated analysis of circulating tumor cells and circulating tumor DNA to detect minimal residual disease in hepatocellular carcinoma" has been published in a highly impactful journal, *Clinical and Translational Medicine* (Impact Factor: 11.5). The Company's Mutation Capsule™ technology was used in the publication and the full article can be foundhere.

Recurrence is the major reason for mortality after hepatectomy or liver transplantation surgery for HCC.[1-4] It is difficult to precisely manage adjuvant therapy to prevent recurrence after surgery. Thanks to the multiplex profiling feature of Mutation Capsule™ technology, a comprehensive cell-free DNA (cfDNA) analysis was conducted enabling a head-to-head comparison of the biomarkers and approaches for predicting recurrence, including profiling both circulating tumor cells (CTCs) and circulating tumor DNA (ctDNA) in the same blood samples. In the publication, 66 patients were eligible for analysis using postoperative serial blood samples, and the ctDNA status was determined by three strategies:

- *Personalized assay targeting mutations from whole-exome sequencing (WES) on tumor samples*
- *Universal panel targeted sequencing (UPTS) covering the most frequent alterations in HCC, along with HBV integration*
- *Tumor-naïve fixed panel by profiling ctDNA without considering the mutation status in tumor tissues*

In predicting recurrence-free survival rates through Kaplan-Meier analysis, UPTS showed strong performance ($p < .0001$; HR 12.95, 95% CI = 5.08–33.03) comparable to personalized assay ($p < .0001$; HR 11.77, 95% CI = 4.96–27.96) in the cases with mutations or HBV integrations detected in tumor tissues. The prediction power of the tumor-naïve assay was less than the personalized assays ($p < .0001$; HR 6.77, 95% CI = 3.16–14.51). Furthermore, the researchers explored the synergistic effect of CTCs and ctDNA. The data showed that the performance of cfDNA based tumor-naïve assays could be further improved by combining with CTCs. These findings underscore the importance of CTC and ctDNA integration in recurrence prediction and could also provide a reference for selecting strategies for HCC MRD surveillance.

"MRD testing may help in the clinical management for patients, well before metastatic lesions grow to significant size detectable by conventional methods such as MRI and CT scan. This publication adds to a growing body of clinical evidence of Mutation Capsule™, highlighting its versatility in MRD assay developments," said Sizhen Wang, Chairman, Co-Founder and CEO of Genetron Health. "Regarding our partnership with AstraZeneca R&D China in developing personalized assays, assay optimization is currently ongoing and a commercial launch is planned for this year. Genetron is also evaluating different biomarkers for the tumor-naïve MRD approach. We are excited that these programs could not only expand our product offerings in the continuum of care for cancer, but may also help more patients detect returning cancer sooner than current methods."

Recently published MRD assay data based on Genetron Health's Mutation Capsule™ also include:

- Gastric cancer data in the *Journal of Hematology & Oncology*: the personalized MRD assay showed excellent sensitivity to detect 0.001% tumor DNA from peritoneal lavage fluid samples for precise prediction of peritoneal dissemination.
- Locally advanced rectal cancer data in *eBioMedicine*, part of *THE LANCET Discovery Science*: Analysis on different MRD approaches after neoadjuvant therapy.

References

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About Clinical and Translational Medicine

Clinical and Translational Medicine is an international, peer-reviewed, and open access journal with aims at promoting and accelerating the translation of preclinical research to a clinical application and the communication between basic and clinical scientists. The journal emphasizes clinical potential and application of new biotechnologies, biomaterials, bioengineering, disease-specific biomarkers, cellular and molecular medicine, omics science, bioinformatics, applied immunology, molecular imaging, drug discovery and development, and regulation and health policy. The journal is focused on the bench to bedside approach, favoring studies and clinical observations which generate hypotheses and questions relevant to the patient and disease, and guide the investigations of cellular and molecular medicine. For more information, please visit: https://onlinelibrary.wiley.com/page/journal/20011326/homepage/productinformation.html

About Genetron's MRD program in solid tumor and Mutation Capsule™ technology

Genetron's MRD program in solid tumor is powered by its Mutation Capsule™ technology. This proprietary technology allows the detection of

methylation alterations and mutations in one reaction, and thus requires less blood while achieving high detection sensitivity. In addition, the cell-free DNA (cfDNA) sample's genetic and epigenetic information can be preserved and amplified in the Mutation Capsule™ library, and can be used for multiple analyses without sacrificing sensitivity. In MRD development, this feature reduces panel validation time and provides head-to-head comparisons between different MRD strategies, enabling significant time and cost savings. Mutation Capsule™ also allows more sensitive detection in low yield cfDNA samples, with higher conversion efficiency of cfDNA molecules. The technology was recently granted an invention patent (201910983038.8) by the China National Intellectual Property Administration.

Co-Development Agreement with AstraZeneca R&D China for Personalized MRD Tests for Solid Tumors in China

In November 2021, Genetron announced a collaboration agreement with AstraZeneca R&D China for the joint development in China of next-generation sequencing (NGS)-based tumor-informed (personalized) minimal residual disease (MRD) tests for various solid tumor types. Under the agreement, the companies will jointly invest capital for this collaboration. For solid tumor clinical trials in China that incorporate the use of NGS-based personalized MRD tests, AstraZeneca plans to incorporate the co-developed MRD test in China-specific studies, subject to fulfillment of individual study criteria. Upon both companies' further agreement, the scope of the agreement may also be expanded to include IVD registration and commercialization. This is an exclusive, multi-year collaboration agreement between both parties, with exclusivity contingent on certain requirements.

About Genetron Holdings Limited

Genetron Holdings Limited ("Genetron Health" or the "Company") (NASDAQ: GTH) is a leading precision oncology platform company in China that specializes in cancer molecular profiling and harnesses advanced technologies in molecular biology and data science to transform cancer treatment. The Company has developed a comprehensive oncology portfolio that covers the entire spectrum of cancer management, addressing needs and challenges from early screening, diagnosis and treatment recommendations, as well as continuous disease monitoring and care. Genetron Health also partners with global biopharmaceutical companies and offers customized services and products. For more information, please visit ir.genetronhealth.com.

Safe Harbor Statement

This press release contains forward-looking statements. These statements are made under the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. Statements that are not historical facts, including statements about the Company's beliefs and expectations, the research results and genomic research, and Company's Mutation Capsule™ technology are forward-looking statements. Forward-looking statements involve inherent risks and uncertainties, and a number of factors could cause actual results to differ materially from those contained in any forward-looking statement. In some cases, forward-looking statements can be identified by words or phrases such as "may", "will," "expect," "anticipate," "target," "aim," "estimate," "intend," "plan," "believe," "potential," "continue," "is/are likely to" or other similar expressions. Further information regarding these and other risks, uncertainties or factors is included in the Company's filings with the SEC. All information provided in this press release is as of the date of this press release, and the Company does not undertake any duty to update such information, except as required under applicable law.

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